OIPE IAP13
SEP 13 2005
PATENT & TRADEMARK OFFICE

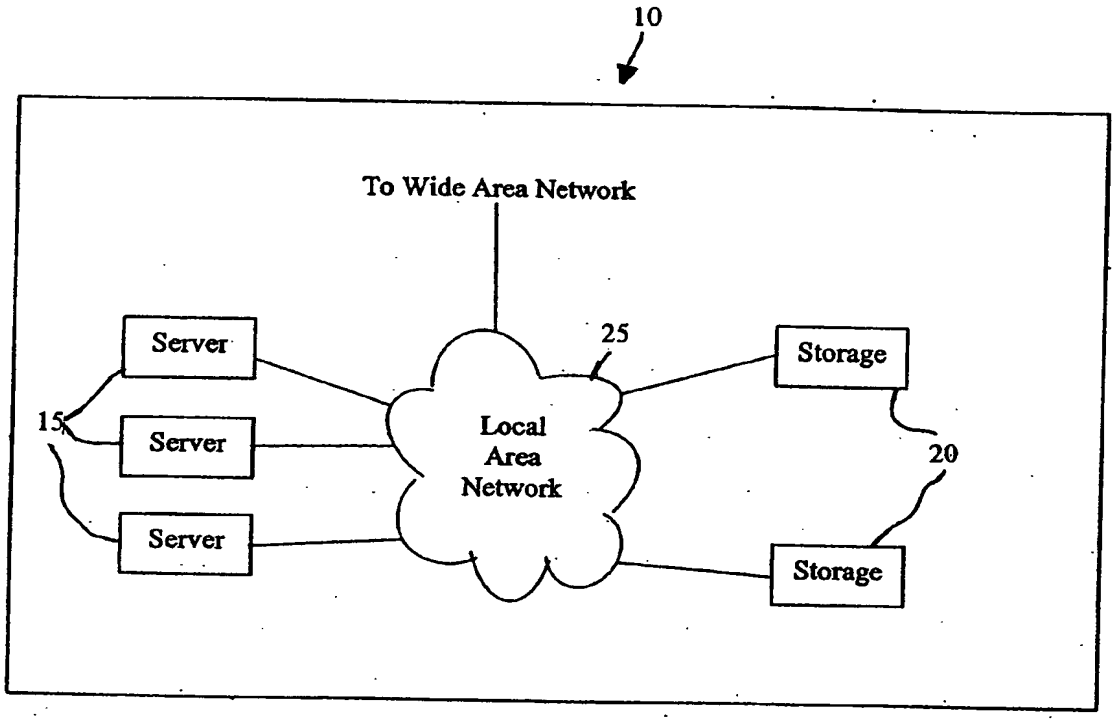

FIGURE 1A

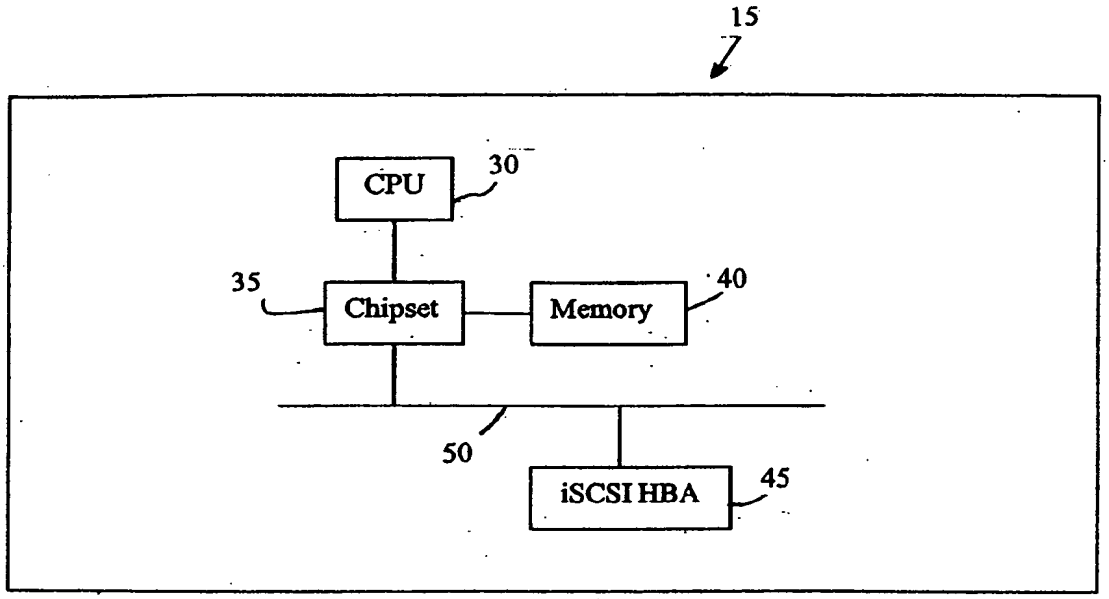

FIGURE 1B

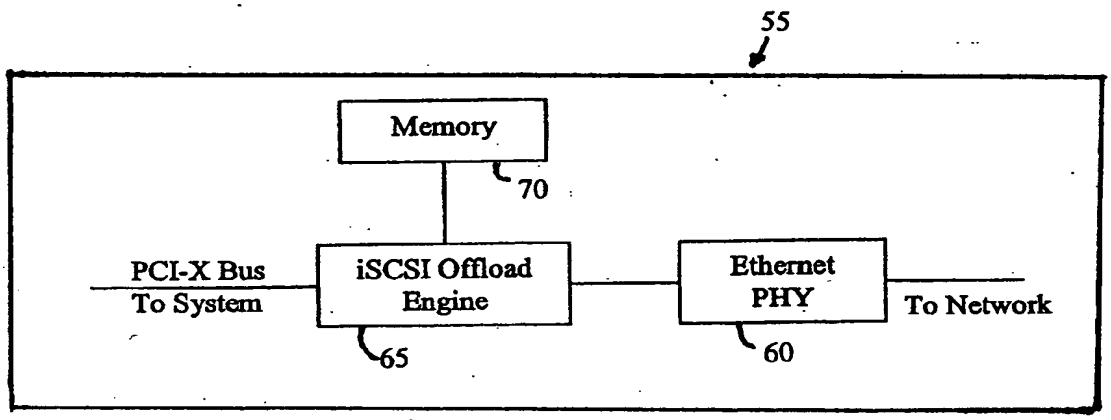

FIGURE 1C

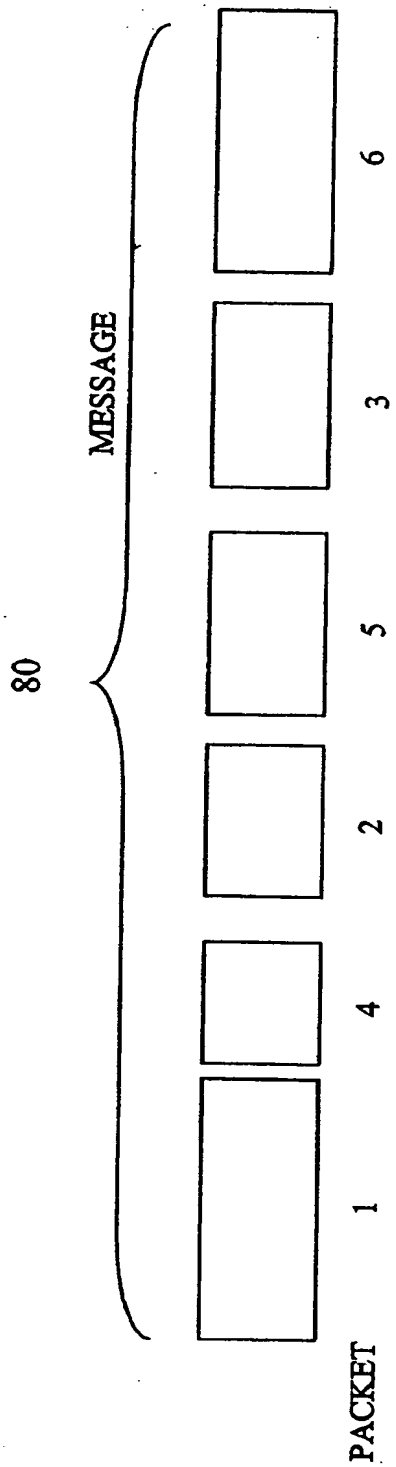

FIGURE 2A

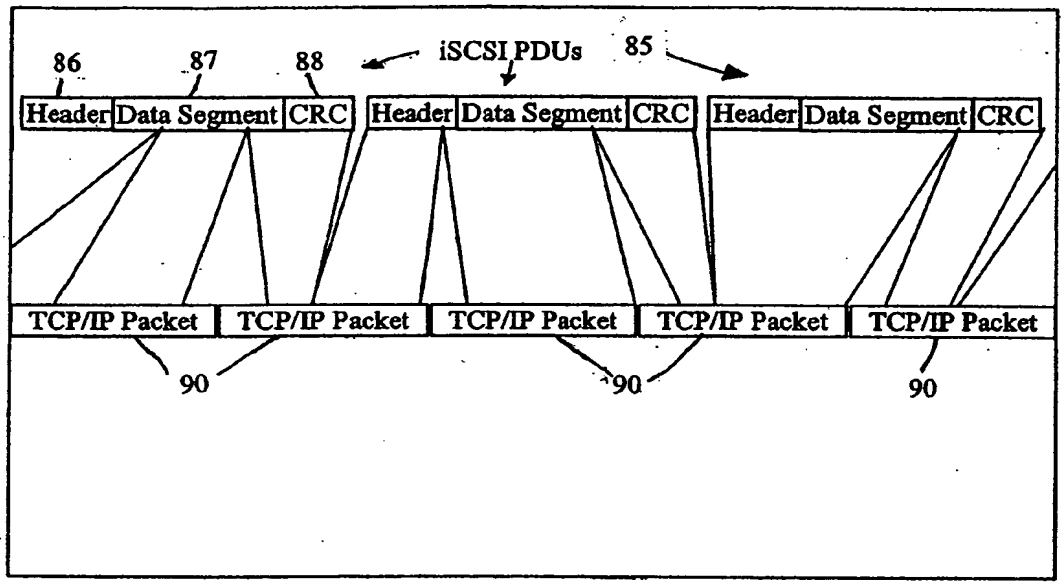
86
87
88
iSCSI PDUs
85
Header
Data Segment
CRC
Header
Data Segment
CRC
Header
Data Segment
CRC
TCP/IP Packet
TCP/IP Packet
TCP/IP Packet
TCP/IP Packet
TCP/IP Packet
90
90
90

FIGURE 2B

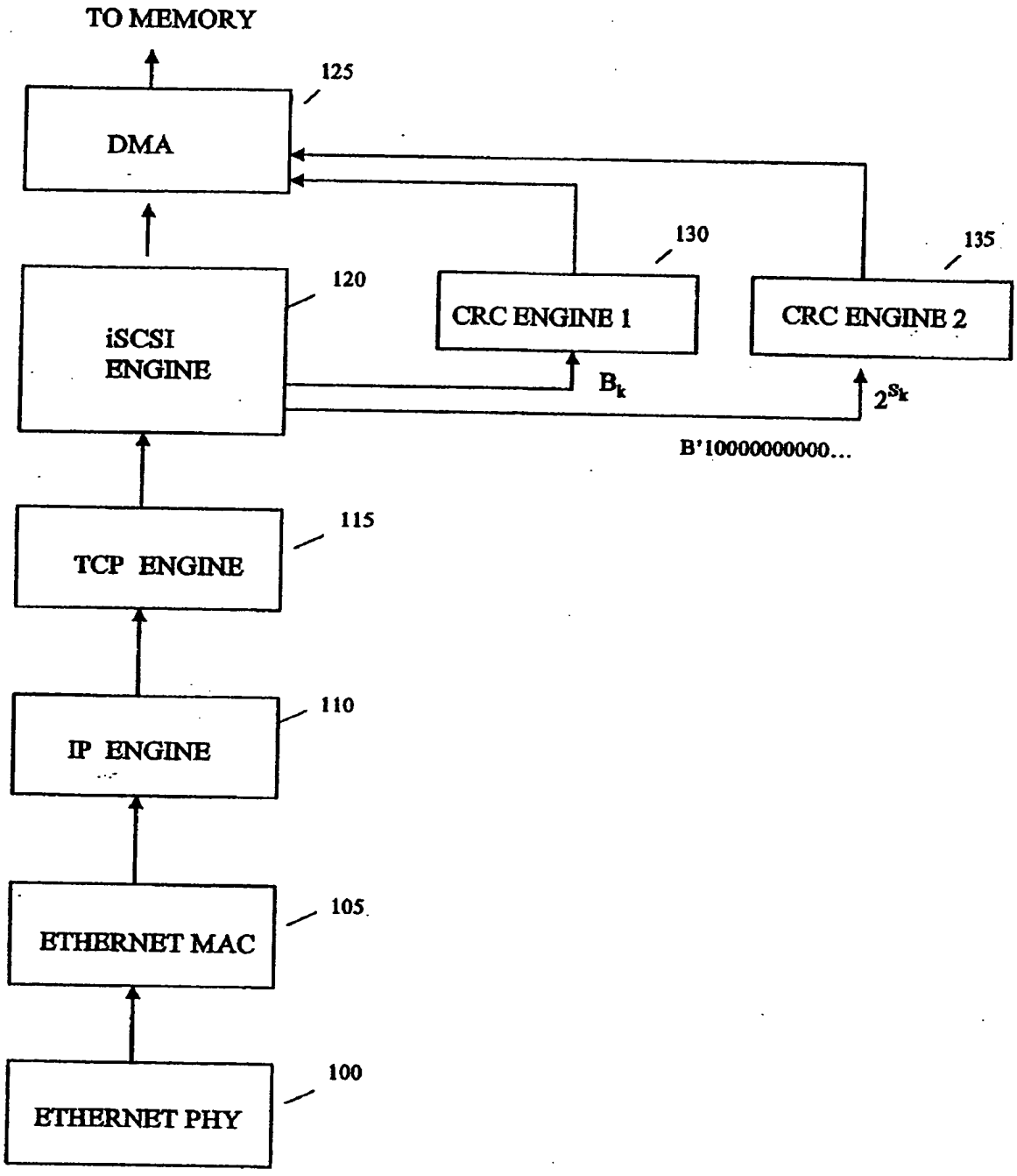
TO MEMORY
125
DMA
130
135
120
iSCSI ENGINE
CRC ENGINE 1
CRC ENGINE 2
B_k
2^{S_k}
B'10000000000...
115
TCP ENGINE
110
IP ENGINE
105
ETHERNET MAC
100
ETHERNET PHY

FIGURE 3

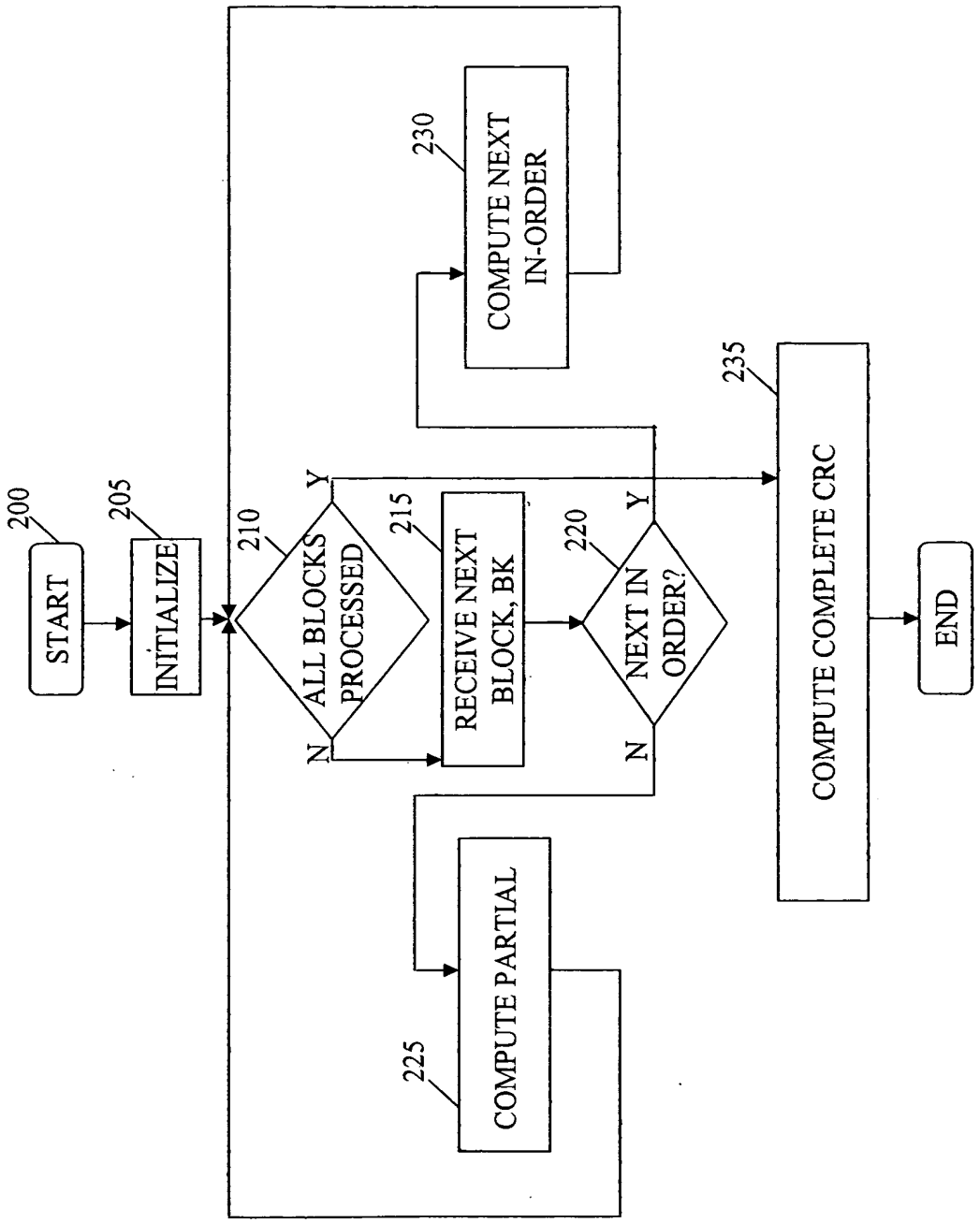
200
START
205
INITIALIZE
210
ALL BLOCKS PROCESSED
Y
N
215
RECEIVE NEXT BLOCK, BK
220
NEXT IN ORDER?
Y
N
225
COMPUTE PARTIAL
230
COMPUTE NEXT IN-ORDER
235
COMPUTE COMPLETE CRC
END

FIGURE 4

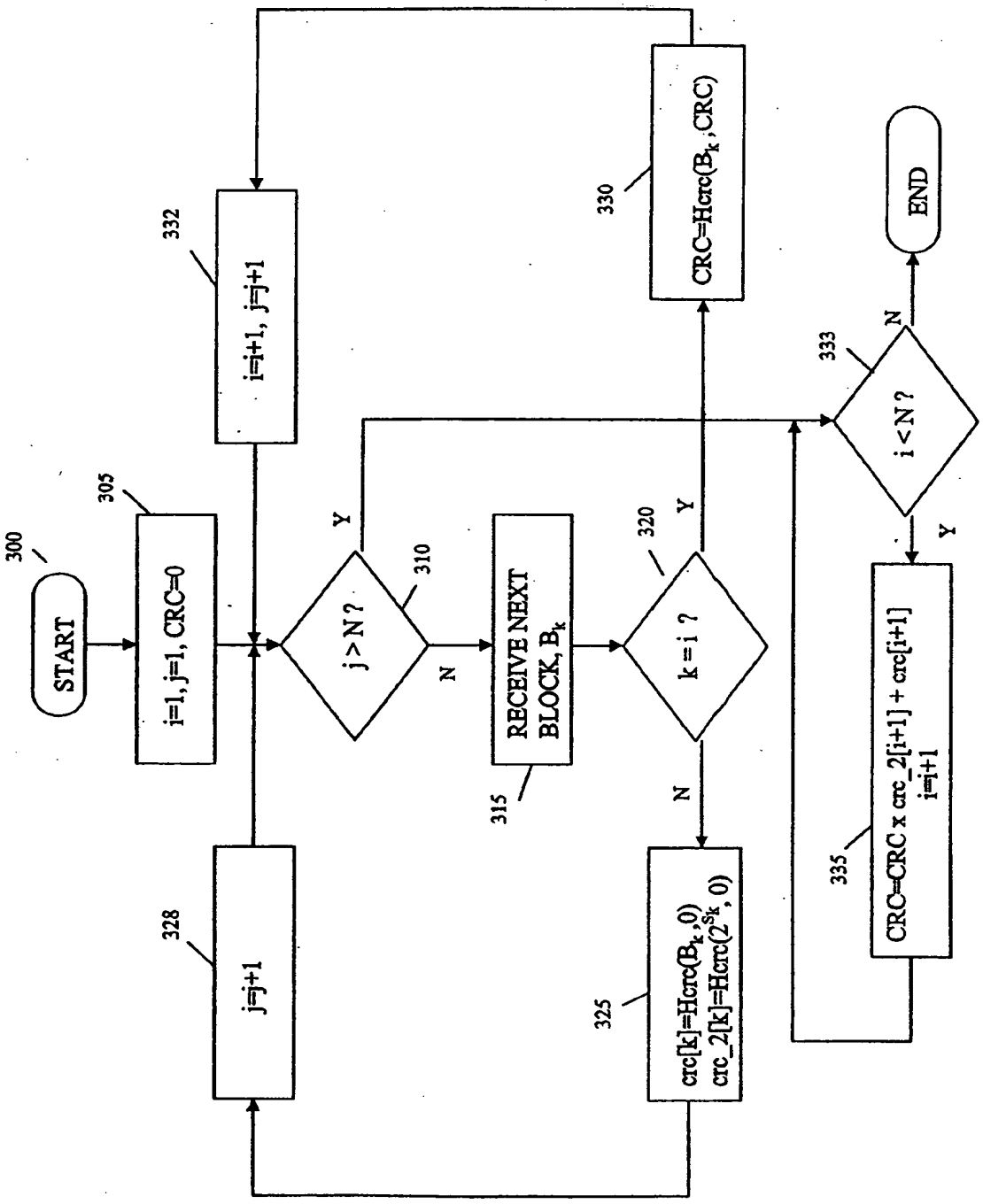
300
START
305
i=1, j=1, CRC=0
310
j > N ?
Y
N
315
RECEIVE NEXT BLOCK, B_k
320
k = i ?
Y
N
325
crc[k]=Hcrc(B_k, 0)
crc_2[k]=Hcrc(2^{Sk}, 0)
328
j=j+1
330
CRC=Hcrc(B_k, CRC)
332
i=i+1, j=j+1
333
i < N ?
N
Y
335
CRC=CRC x crc_2[i+1] + crc[i+1]
i=i+1
END

FIGURE 5